U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
Assistant Secretary for Housing-Federal Housing Commissioner

TO: DIRECTORS, HOUSING DIVISION
DIRECTORS, MULTIFAMILY DIVISION
DIRECTORS, SINGLE FAMILY DIVISION

Series and Series Number:

MATERIALS RELEASE NO. 1296

ISSUE DATE: March 27, 1998

REVIEW DATE: March 27, 2001

SURJECT: 1. Product Raupex Crosslinked Polyethylene (PEX) Plastic Pipe and Fittings

2. Name and Address of Manufacturer P.O. Box 1706
Leesburg, VA 20177

Data on the nonstandard product, described herein have been reviewed by the Department of Housing and Urban Development (HUD) and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement, or approval by HUD of the described product, and any statement or representation, however made, indicating such approval or endorsement by HUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

<u>USE</u>: The Rehau Incorporated Raupex crosslinked polyethylene (PEX) plastic pipe and fittings system, is intended for use in potable hot and cold water distribution systems up to a maximum continuous pressure of 160 psi at 73°F, 100 psi at 180°F and 80 psi at 200°F. It may also be used in hydronic radiant heating systems.

DESCRIPTION:

The Rehau Incorporated Raupex water distribution system shall be made from high density polyethylene having a minimum density of 58 lbs/ft³. The pipe shall have one standard dimension ratio (SDR9) and the fittings shall have a nominal size of 1/2", 3/4" and 1". Only Everloc brass fittings recommended by Rehau Incorporated are acceptable for use with the Raupex system.

REQUIREMENTS:

The Rehau Incorporated Raupex water distribution system shall comply with the following standards:

- ASTM F 876-96 "Standard Specification for Crosslinked Polyethylene (PEX) Tubing"
- ASTM F 877-96a "Standard Specification for Crosslinked Polyethylene (PEX) Plastic Hot and Cold Water Distribution Systems"
- ANSI/NSF 14-96 Plastic Piping Components and Related Materials
- ANSI/NSF 61-97 Drinking Water Systems Components-Health Effects
- Rehau 1-97 "Pex Plumbing Systems Technical Manual"

INSTALLATION:

- 1. The Rehau Incorporated Raupex PEX plastic pipe and fitting system shall be installed according to the manufacturer's instructions described in Rehau Incorporated Pex Plumbing System Technical Manual 1997.
- 2. Only fittings approved by Rehau Incorporated shall be used.
- 3. The Raupex plastic pipe shall not be exposed to direct sunlight for a period exceeding 90 days.
- 4. Do not install Raupex pipe within 6" of any gas appliance vents, or within 12" of any recessed light fixtures.
- 5. Raupex plastic pipe should not be anchored rigidly, but allow 3/8" to 1/2" per yard of pipe for thermal expansion.
- 6. The minimum bend radius for Raupex plastic pipe shall be five times the outside diameter of the pipe being used.

CERTIFICATION:

Rehau Incorporated certifies that the Raupex crosslinked polyethylene pipe and fittings and systems shall be produced in conformance to this MR, and are in compliance

with a validation program at NSF International, Inc., in accordance with the Code of Federal Regulations, 24 CFR 200.935. NSF International, Inc. shall inspect the manufacturer's facility to assure that the quality assurance procedures are being followed. Four samples of this product shall be selected and tested each year to validate the manufacturer's conformance to the requirements of this MR. Each pipe and fittings certified as conforming to this MR, shall be labeled with the following information:

- 1. The NSF validation mark.
- 2. The manufacturer's name.
- 3. The manufacturer's conformance to this MR.

WARRANTY:

Rehau Incorporated warrants the Raupex crosslinked polyethylene pipe and fittings systems for ten (10) years, under normal use, against defects in materials and workmanship. Should any defect or poor performance occur, Rehau Incorporated will make a full cost allowance for the replacement of the defective product.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (MR) commits the manufacturer to fulfill, as a minimum, the following:

- Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
- 2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
- 3. When requested, provide the Office of Consumer and Regulatory Affairs, Manufactured Housing and Standards Division, HUD Headquarters, with a representative list of properties, in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
- 4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision,

90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate User Fee shall be sent to:

U.S. Department of Housing and Urban Development Technical Suitability of Products Fees P.O. Box 954199 . St. Louis, MO 63195-4199.

The holder of this MR may apply for revision at any time prior to the Review Date. Minor revisions may be in the form of a supplement to the MR.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of the MR. HUD will notify the manufacturer that the MR may be canceled when:

- conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product, or system,
- the manufacturer has changed its organizational form without notifying HUD, or
- 3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.